

**Amendments to the Claims**

Please amend claim 32 as indicated in the listing of claims.

The listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1 to 31 (Canceled)

32. (Currently amended) An optical irradiation device comprising one or more LEDs for emitting radiation, the one or more LEDs thermally connected to one or more heat pipes, wherein each of the one or more LEDs are proximate to an end of one of the one or more heat pipes, a unitary thermal connector directly connecting the one or more LEDs and the one or more heat pipes, said one or more heat pipes conducting heat away from the one or more LEDs.
33. (Previously presented) The optical irradiation device according to claim 32 further comprising a fan or Peltier device proximate to the one or more heat pipes.
34. (Previously presented) The optical irradiation device according to claim 32 further comprising a heat sink in thermal contact with the one or more heat pipes.
35. (Previously presented) The optical irradiation device according to claim 33, further comprising a heat sink in thermal contact with the one or more heat pipes.
36. (Previously presented) The optical irradiation device according to claim 32, wherein the one or more heat pipes provides a means for cooling the one or more LEDs such that the one or more LEDs are capable of being driven to produce more radiation than the one or more LEDs would be capable of without the one or more heat pipes.

37. (Previously presented) The optical irradiation device according to claim 32, wherein the one or more LEDs comprise a plurality of LEDs formed into one or more clusters.
38. (Previously presented) The optical irradiation device according to claim 32, wherein the one or more LEDs comprise a plurality of LEDs formed into one or more arrays.
39. (Canceled)